## **THE PORT AUTHORITY OF NY & NJ**

Robert E. Galvin
Chief Technology Officer

Federal Communications Commission 445 12th Street SW Washington, DC 20554 (Filed Electronically)

Subject: Regarding FCC Public Notice 16-68 ET Docket No. 13-49 "Unlicensed National Information Infrastructure (U-NII) Devices in the 5GHz Band"

As the operator of critical transportation infrastructure in the New York-New Jersey metropolitan region, the Port Authority of New York and New Jersey (PANYNJ) is committed to transportation technology deployment for operational efficiencies and safety benefits, and supports the adoption of next generation vehicle safety technologies enabled by vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications will significantly reduce traffic fatalities and injuries. Each year, more than 250 million vehicles cross the Hudson River using Port Authority bridge and tunnel facilities. The safety & security of the passengers in those vehicles are of paramount importance to us. The PANYNJ is investing tens of millions of dollars in the use of Intelligent Transportation Systems at our facilities, some of which are currently in operation. These systems enable direct communication between vehicles and from static locations along the current infrastructure.

Dedicated Short Range Communications (DSRC)-enabled wireless interoperability and connectivity is essential for successful widespread deployment of connected vehicle technologies nationwide. The PANYNJ is excited about the safety and mobility benefits of these technologies. The NHTSA estimates such technologies could mitigate over 80 percent of the more than four million vehicle crashes on our nations roadways saving thousands of lives and reducing billions of dollars in damages. Crash avoidance technologies enabled through DSRC communications could also save millions of productive hours wasted in traffic tie ups which choke our crossings whenever an unfortunate crash occurs.

We understand why FCC, facing additional demands by other users, seeks to open up the allocated spectrum. However, we believe every effort must be made to ensure any proposed technical solution guarantees, through rigorous testing, interference-free operation of the DSRC safety-critical applications while allowing for spectrum sharing in the 5.9 GHz band.

Transportation industry partners and agencies have been working on these technologies for years, investing billions of dollars to develop connected vehicle technology applications. The

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reliable and secure usage of Dedicated Short Range Communication within the 5.9GHz spectrum will be crucial to the success of V2V and V2I deployments.

The Port Authority of NY & NJ suggests that the FCC take the following steps to ensure interference-free interoperability within the 5.9GHz spectrum, balancing the V2V and V2I uses and other potential equipment and services to address our nation's transportation challenges:

- 1. Continue thorough testing of the "Listen, Detect and Avoid" protocol for auto safety uses inside the 5.9GHz spectrum.
- 2. Conduct thorough field testing of unlicensed devices that already exist on the 5.9GHz spectrum that could possibly create interference to DSRC communications.
- 3. Frame a testing program that incorporates the "re-channelization" approach. This would likely involve moving all safety related DSRC communication to the upper part of the band and permitting sharing of unlicensed devices to the lower part of the spectrum.
- 4. Proceed with the FCC recommended three-phase test plan.

The Port Authority of NY & NJ believes that DSRC V2V and V2I communication technologies may be able to co-exist with existing Wi-Fi technologies across the 5.9GHz spectrum, however, ample safety and security mechanisms must be built into the new devices to prevent interference of new V2V and V2I technologies designed to save lives and save money.

Thank you for this opportunity to share with the FCC the Port Authority's expertise, experience and concerns. If I can be of additional assistance, please feel free to contact me.

Sincerely,

Robert Galvin Chief Technology Officer The Port Authority of NY & NJ